AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of creating thermal functional designs of ~~textiles and~~ articles of clothing using a computer and ~~visual~~ a display monitor controlled by the computer, the method comprising:

with the aid of an apparel computer aided design function, entering designs of articles of clothing in a pattern database;

supplying the computer with information from databases relating to thermal and physiological characteristics of a human body and thermal characteristics of respective textile materials ~~for computational simulation of the information,~~ for making the articles of clothing;

with the computer and using the pattern database, simulating thermal functional performance of the articles of clothing; and

creating visual images ~~for~~ displayed on the monitor ~~showing modules of,~~ visualizing thermal functional performance of the designs ~~for designing apparel and textile~~ the articles of clothing.

2. (Currently Amended) The method according to claim 1, in which the database of the physiological characteristics of a human body comprises human model data for specific body characteristics, including size and shape.

3. (Currently Amended) The method according to claim 1, in which the database of ~~the~~ thermal characteristics of respective textile materials comprises ~~clothing patterns data and~~ product specification data.

4. (Currently Amended) The method according to claim 1, in which the database of thermal characteristics of the human body comprises thermal property data, including thermo-physiological and thermal comfort data of the human body.

5. (Currently Amended) The method according to claim 1, in which the database of the ~~thermal characteristics of~~ textile materials comprises thermal property data, including ~~data for~~ fibres, yarns, fabrics, and garments.

6. (Currently Amended) A method of creating thermal functional designs of ~~textiles and~~ articles of clothing, the method comprising:

extracting a pattern for an article of clothing from a pattern database;

selecting thermal-physiological characteristics of the human body from a body database;

selecting thermal characteristics of a textile material from a textile database; and

simulating fitting on the human body of the article of clothing made from the textile selected ~~on the human body~~ and, using the thermal-physiological characteristics selected, displaying a visual image of thermal comfort of a human wearing the article of clothing made from the textile ~~to aid designing textiles and articles,~~ visualizing thermal functional performance of the article of clothing.

7. (Previously Presented) The method according to claim 6 wherein the textile database includes thermal property data for textile fibers, yarns, and fabrics.